

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No.: 10/798,480

Attorney Docket No.: Q80462

AMENDMENTS TO THE DRAWINGS

Attachment: Replacement Sheets

Figures 3, 31A, 31B, 31C and 32 labeled as Prior Art

REMARKS

I. Allowable Subject Matter

The Examiner has indicated that claims 7 and 8 contain allowable subject matter, but are objected to as being dependent upon a rejected base claim.

II. Preliminary Matters

The Examiner has returned the initialed PTO 1449 forms for three Information Disclosure Statements. However, Applicant respectfully requests the initialed PTO 1449 form for the Information Disclosure Statement filed on August 12, 2005.

The Examiner has objected to Figures 3, 31A, 31B, 31C and 32 since they are not labeled as “prior art.” Applicant does not submit that Figures 31A-31C constitute prior art under 35 U.S.C. § 102. Accordingly, Applicant has merely labeled such figures as “related art.”

The Examiner has objected to the specification as failing to provide proper antecedent basis for the “regulating device” recited in claims 14 and 15. Since claim 15 has been canceled, without prejudice or disclaimer, Applicant submits that the objection to such claim is now moot. In regard to claim 14, Applicant submits that a non-limiting embodiment of the claimed regulating device is shown by the driven roller 352 of Figure 11 (pg. 45, lines 15-16 of specification).

Further, the Examiner has objected to claims 1-34 due to minor informalities. As an initial matter, the Examiner questions the Applicant’s use of the term “adsorbing.” As indicated by the Examiner, the term appears to be caused by an error during translation of the Application.

Accordingly, Applicant is filing herewith a substitute specification that either changes all occurrences of “absorbed” to “sucked,” etc., or deletes the term “adsorbed.” Applicant submits that no new matter has been added. Further, Applicant has amended the claims in a similar manner. In view of the amendments, Applicant submits that the objection is overcome.

Next, the Examiner has objected to the term “fixed material” and maintains that it is misleading. Accordingly, Applicant has amended the claims to recite “medium” instead of “fixed material.” Further, as set forth in the substitute specification, Applicant has referred to the term “medium” when “fixed material” is first introduced. Applicant submits that the amendment does not constitute new matter since the Application specifically states that the recording medium is to be a fixed material (i.e., such that the terms can be used interchangeably) (page 1, lines 14-23).

In regard to claims 3 and 8, the Examiner maintains that the Applicant has not defined the scanning and subscanning directions. Accordingly, in view of the non-limiting embodiment on page 37, lines 13-19, Applicant has amended claims 3 and 8 for clarification.

In regard to claim 5, the Examiner maintains there is no antecedent basis for the claimed “sucking chambers.” However, antecedent basis for the claimed sucking chambers is provided in lines 13-18 of claim 1.

Finally, in regard to claim 27, the Examiner maintains that the “decompression chamber” is a double recitation of the one recited in claim 22. However, in view of the amendments to claim 22, Applicant submits that the objection is now moot.

In addition to the above, Applicant has included additional clarifying amendments to claims 1, 32 and 33.

III. Rejections under 35 U.S.C. § 112, first paragraph

The Examiner has rejected claims 15 and 17/15 under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. In particular, the Examiner maintains that the claimed “regulating device” is not described in the specification. However, Applicant has canceled claim 15, without prejudice or disclaimer, and has amended the dependency of claim 17 accordingly. Therefore, Applicant submits that the rejection of claims 15 and 17/15 is now moot.

IV. Rejections under 35 U.S.C. § 102(b) in view of U.S. Patent No. 6,179,285 to Teumer et al. (“Teumer”)

The Examiner has rejected claims 1-4, 6, 9/1-9/4, 9/6-9/8 and 10 under 35 U.S.C. § 102(b), as allegedly being anticipated by Teumer.

A. Claim 1

Applicant submits that claim 1 is patentable over the cited reference. For example, claim 1 recites that a side edge of the sucking chamber is provided with a slant face.

Assuming *arguendo* that the grooves 116 of Teumer disclose sucking chambers, such grooves do not have a slant face as recited in claim 1 (see Figures 1 and 2 of Teumer).

Accordingly, Applicant submits that claim 1 is not anticipated by Teumer, and respectfully requests the Examiner to withdraw the rejection.

B. Claims 2-4, 6 and 9

Since claims 2-4, 6 and 9 are dependent upon claim 1, Applicant submits that such claims are patentable at least by virtue of their dependency.

C. Claim 10

Since claim 10 recites features that are analogous to the features recited in claim 1, Applicant submits that claim 10 is patentable for at least analogous reasons as recited above.

V. Rejections under 35 U.S.C. § 102(b) in view of JP 9-220837 to Nomura ("Nomura")

The Examiner has rejected claims 1, 5, 9/5, 10-14, 16, 17/11-7/14 and 17/16 under 35 U.S.C. § 102(b) as allegedly being anticipated by Nomura.

A. Claims 1, 10 and 11

Applicant submits that claims 1, 10 and 11 are patentable over the cited reference. For example, claims 1, 10 and 11 recite that a side edge(s) of the suction chamber(s) have a slant face.

Assuming *arguendo* that the substantially oval-shaped recesses near reference numeral 58 disclose a type of sucking chamber and/or dimple (see figure 11), Nomura still fails to teach or suggest that any side edges of the recesses have a slant face. Accordingly, Applicant submits

that claims 1, 10 and 11 are not anticipated by Nomura, and respectfully requests the Examiner to withdraw the rejection.

B. Claims 5, 9, 12-14, 16 and 17

Since claims 5, 9, 12-14, 16 and 17 are dependent upon one of claims 1, 10 or 11, Applicant submits that such claims are patentable at least by virtue of their dependency.

VI. Rejections under 35 U.S.C. § 102(b) in view of U.S. Patent No. 6,315,404 to Wotton et al. ("Wotton")

The Examiner has rejected claims 18 and 21/18 under 35 U.S.C. § 102(b) as allegedly being anticipated by Wotton.

A. Claim 18

Since the features of claim 19 have been incorporated into claim 18, and claim 19 is rejected under 35 U.S.C. § 103(a) in view of Nomura and Wotton, as set forth below, Applicant's comments are in regard to the alleged combination of Nomura and Wotton.

Applicant submits that one skilled in the art would not be motivated to combine Nomura and Wotton in the manner set forth by the Examiner. For example, Nomura teaches a transportation surface that is stable with respect to the apparatus. On the other hand, Wotton teaches a moving belt on which sucking holes are formed. Even though the two surfaces are served to transport the medium thereon, the fundamental relationship between the surfaces and the medium is very different. That is, on Nomura's transportation surface, the medium must be

relatively moved with respect to the surface. On the other hand, in Wotton, both the belt and the medium move together. Thus, since the basic structure of the references diverge, Applicant submits that one skilled in the art would not be motivated to modify Nomura using the teachings of Wotton.

In view of above, Applicant submits that claim 18 is patentable over the cited references.

B. Claim 21

Since claim 21 is dependent upon claim 18, Applicant submits that claim 21 is patentable at least by virtue of its dependency.

VII. Rejections under 35 U.S.C. § 102(b) in view of U.S. Patent No. 6,196,672 to Ito et al. ("Ito")

The Examiner has rejected claims 29, 30, 32 and 34 under 35 U.S.C. § 102(b) as allegedly being anticipated by Ito.

A. Claim 29

Applicant submits that claim 29 is patentable over the cited reference. For example, claim 29 recites a sucking chamber formed to extend substantially from an upstream end to a downstream end of a medium transportation surface. Further, a plurality of sucking holes are formed in the sucking chamber.

Applicant submits that Ito fails to disclose a sucking chamber that is connected to the alleged sucking hole 36 (Figures 6(a) and 6(b)). Accordingly, Applicant submits that claim 29 is patentable over the cited reference.

B. Claims 30, 32 and 34

Since claims 30, 32 and 34 are dependent upon claim 29, Applicant submits that such claims are patentable at least by virtue of their dependency.

VIII. Rejections under 35 U.S.C. § 103(a) in view of Nomura and Wotton

The Examiner has rejected claims 19-20, 21/19 and 21/20 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Nomura in view of Wotton.

A. Claim 19

Since claim 19 has been canceled, without prejudice or disclaimer, and the features of claim 19 have been incorporated into claim 18, Applicant refers the Examiner to the comments presented above.

B. Claims 20 and 21

Since claims 20 and 21 are dependent upon claim 18, Applicant submits that such claims are patentable at least by virtue of their dependency.

IX. Rejections under 35 U.S.C. § 103(a) in view of Nomura and JP 07-009712 to Kanemura (“Kanemura”)

The Examiner has rejected claims 22-27 and 28/22-28/27 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Nomura and Kanemura. However, since claims 22-28 are dependent upon claim 1, and Kanemura fails to cure the deficient teachings of Nomura in regard to claim 1, Applicant submits that such claims are patentable at least by virtue of their dependency.

X. Rejections under 35 U.S.C. § 103(a) in view of Ito

The Examiner has rejected claims 31 and 33 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Ito.

A. Claim 31

Applicant submits that claim 31 is patentable over the cited reference. Claim 31 recites that the radius of the rounded surface (of the chamfer) ranges from 0.2 mm to 1 mm.

The Examiner acknowledges that Ito fails to disclose the above feature, but contends that such recitation is a matter of routine experimentation. However, as set forth in the non-limiting embodiment on pages 66 and 67 of the current Application, the specific range is determined to balance a sucking sound pressure and a generated negative pressure. The Ito reference fails to indicate why the suction port 36 is provided with a rounded edge, let alone address specific problems in regard to sucking sound pressure and generated negative pressure due to the radius of the rounded portion. MPEP 2144.05 (II)(B) explains that:

A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation (Id., internal citation omitted).

Applicant submits that nothing in the cited prior art reference would have motivated those skilled in the art to choose the claimed range, because at the very least, the specific reasons for providing the specified range are not even mentioned, let alone addressed, by the reference. Accordingly, Applicant submits that the claimed radius is not a result-effective variable, and thus, is not a matter of routine experimentation.

In addition, Applicant submits that claim 31 is patentable at least by virtue of its dependency.

B. Claim 33

Claim 33 recites that the taper of the tapered surface (of the chamfered surface) has an opening angle ranging from 60 degrees to 90 degrees and an axial length ranging from 1 mm to 2 mm.

The non-limiting embodiments on pages 67 and 68 of the present Application disclose that the angle and length ranges are also determined to balance a sucking sound pressure and a generated negative pressure. Accordingly, for at least analogous reasons as presented above for claim 31, Applicant submits that the features of claim 33 are not result-effective variables, and thus, are not a matter of routine experimentation.

In addition, Applicant submits that claim 33 is patentable at least by virtue of its dependency.

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XI. Newly Added Claims

Applicant has added claims 35 and 36 to provide more varied protection for the present invention.

XII. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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